

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claims 1-4 (canceled).

Claim 5 (previously presented): A cathode circuit for an imaging tube comprising:  
a plurality of high voltage elements; and  
at least one voltage-clamping device coupled between said plurality of high voltage elements and preventing occurrence of overvoltage transients in the cathode circuit;  
wherein said at least one voltage-clamping device comprises a plurality of feedthrough holes.

Claim 6 (canceled).

Claim 7 (canceled).

Claim 8 (previously presented): A cathode circuit for an imaging tube comprising:  
a plurality of high voltage elements; and  
at least one voltage-clamping device coupled between said plurality of high voltage elements and preventing occurrence of overvoltage transients in the cathode circuit;  
wherein said at least one voltage-clamping device is a terminal board formed of resistive or semi-resistive material.

Claims 9-19 (canceled).

Claim 20 (original): An imaging tube comprising:

a cathode cup;

a cathode terminal board coupled to said cathode cup via a first set of high voltage elements;

a high voltage receptacle coupled to said cathode terminal board via a second set of high voltage elements; and

a plurality of voltage clamping devices coupled to and preventing occurrence of overvoltage transients across said first set of high voltage elements and said second set of high voltage elements.

Claim 21 (new): A cathode circuit for an imaging tube comprising:

a receptacle coupled to a terminal board via a first set of high voltage elements;

the terminal board coupled to at least one filament via a second set of high voltage elements;

at least one voltage clamping device coupled to the first set of high voltage elements between the receptacle and the terminal board; and

at least one voltage clamping device coupled to the second set of high voltage elements between the terminal board and the at least one filament.

Claim 22 (new): The cathode circuit of claim 21, further comprising at least one voltage clamping device coupled to the first set of high voltage elements within the receptacle.

Claim 23 (new): The cathode circuit of claim 22, wherein the at least one voltage-clamping device is a discharge gap.

Claim 24 (new): The cathode circuit of claim 22, wherein the at least one voltage-clamping device is formed of a resistive material.

Claim 25 (new): The cathode circuit of claim 22, wherein the at least one voltage-clamping device is a resistive jumper.

Claim 26 (new): The cathode circuit of claim 22, wherein the at least one voltage-clamping device is a varistor.

Claim 27 (new): The cathode circuit of claim 22, wherein the at least one voltage-clamping device is a metal oxide varistor.

Claim 28 (new): A cathode assembly for an imaging tube comprising:  
a cathode post including a first set of high voltage elements;  
a cathode cup assembly coupled to the cathode post including a second set of high voltage elements;  
at least one voltage clamping device coupled to said first set of high voltage elements;  
and  
at least one voltage device coupled to said second set of high voltage elements.

Claim 29 (new): The cathode circuit of claim 28, wherein the at least one voltage-clamping device is a discharge gap.

Claim 30 (new): The cathode circuit of claim 28, wherein the at least one voltage-clamping device is formed of a resistive material.

Claim 31 (new): The cathode circuit of claim 28, wherein the at least one voltage-clamping device is a resistive jumper.

Claim 32 (new): The cathode circuit of claim 28, wherein the at least one voltage-clamping device is a varistor.

Claim 33 (new): The cathode circuit of claim 28, wherein the at least one voltage-clamping device is a metal oxide varistor.